

Consumer-Purchaser DISCLOSURE PROJECT

Better information. Better decisions. Better health.

SEPTEMBER 2011

Ten Criteria for Meaningful and Usable Measures of Performance

EXECUTIVE SUMMARY

Consumers, purchasers, policy-makers, and other stakeholders seek improved quality and affordability in our health care system. A strong set of meaningful and usable performance measures is an essential tool in this pursuit. Currently, there are not enough of these measures, which are vital to:

- Determine whether new models for care delivery and payment are substantially improving health outcomes.
- Help consumers choose health care providers and treatments.
- Engage patients in decisions about their care.
- Give providers information that supports their efforts to improve care.
- Enable purchasers and health plans to reward providers based on quality of care and patient outcomes rather than on volume.

To meet these acute needs, more ambitious standards are required to produce the kinds of quality measures that will drive meaningful improvements in care.

The Consumer-Purchaser Disclosure Project (CPDP) developed **10 criteria** for meaningful and usable measures. These criteria reflect the perspectives of those who receive and pay for care, and should be used to guide the development, endorsement, and use of performance measures. Performance measures must address the needs of those whom the health care system is intended to serve and those who pay the price for poor and inefficient care – *consumers and purchasers*. These criteria are:

1. Make consumer and purchaser needs a priority in performance measurement.
2. Use direct feedback from patients and their families to measure performance.
3. Build a comprehensive “dashboard” of measures that provides a complete picture of the care patients receive.
4. Focus measurement on areas of care where the potential to improve health outcomes and increase the effectiveness and efficiency of care is greatest.
5. Ensure that measures generate the most valuable information possible.
6. Require that all patients fitting appropriate clinical criteria be included in the measure population.
7. Assess whether treatment recommendations are followed.
8. De-emphasize documentation (check-the-box) measures.
9. Measure the performance of providers at all levels (e.g., individual physicians, medical groups, ACOs).
10. Collect performance measurement data efficiently.

Ten Criteria for Meaningful and Usable Measures of Performance

1 MAKE CONSUMER AND PURCHASER NEEDS A PRIORITY IN PERFORMANCE MEASUREMENT.

PROBLEM:

Transforming the health care system requires that consumers and purchasers take a larger role in improving care (i.e., patients should actively participate in their care and be able to select providers who meet their needs, and purchasers should offer providers the right incentives to pursue value instead of quantity of care). Unfortunately, only a small number of the provider performance measures currently available or in use supply adequate information for consumers and purchasers to take such actions.

OPPORTUNITY:

Those working in measurement should take seriously the requirements described below and involve consumers and purchasers meaningfully in decisions related to measure development, endorsement, and use at national and local/regional levels so that their needs are a priority.

2 USE DIRECT FEEDBACK FROM PATIENTS AND THEIR FAMILIES TO MEASURE PERFORMANCE.

PROBLEM:

Most measures currently in use are overly reliant on information generated by the health care system and do not capture the perspective of the person receiving health services, who is often in the best position to evaluate their effectiveness.

OPPORTUNITY:

More measures should assess outcomes and effectiveness of care as experienced by patients and their families. These should include measures of patients' understanding of treatment options and care plans, and their feedback on whether care made a difference. Measure developers should consider how patient-reported data can be collected and used efficiently and effectively as health plans and providers connect electronically with an increasing number of their members/patients.

3 BUILD A COMPREHENSIVE "DASHBOARD" OF MEASURES THAT PROVIDES A COMPLETE PICTURE OF THE CARE PATIENTS RECEIVE.

PROBLEM:

All too often, measures have focused on discrete treatment processes that may be meaningful to providers. But consumers and purchasers are asking for a wide range of measures that capture whether the care provided reflected the patient's preferences, made a difference for that patient, and was delivered safely and efficiently.

OPPORTUNITY:

A comprehensive dashboard of measures will make it possible to assess care from a holistic perspective, including overall effectiveness and efficiency of care. Such a dashboard will allow us to hold individual physicians, accountable care organizations, care teams, hospitals, and other providers accountable for how well they care for their patients using a multi-dimensional view, which is particularly important for those with multiple chronic conditions.

The table on the next page shows a dashboard that covers the full spectrum of measures, categorized by the three-part aim of achieving better health, better care, and lower cost.¹ We recommend that if a measure set cannot address a specific area due to current data or other technical limitations, a clear course should be charted out to develop methods to fill the gap over time.

Appendix 1, on page 10, provides an example of how a comprehensive dashboard of measures might look for maternity care. This example is for illustrative purposes only, and we recognize that completing this dashboard will need to take place over time as the measurement infrastructure for collecting data, including from electronic health records, becomes more robust.

The Patient-Centered Measure Dashboard

Better Health	Better Care	Lower Cost
<ul style="list-style-type: none"> • Clinical outcomes of treatment: The results of care that are typically reported by a doctor or other clinician. Examples of clinical outcomes include treatment complications, health status, morbidity, mortality, preventable readmissions, and laboratory determinations of physiologic values. • Patient-reported outcomes of treatment: Assessments by patients of whether treatment is “working.” These may include patients’ reports of well-being, resolution of pain, improved functioning. 	<ul style="list-style-type: none"> • Appropriateness of care: Underuse and overuse of diagnostic and treatment resources – which are typically assessed by the process measures in use today – and misdiagnosis. Overuse focuses on whether a treatment or procedure is appropriate given its net clinical benefit, expenditure of resources, and risk to the patient, e.g., exposure to radiation or complications from surgery. Underuse occurs when patients do not receive medically necessary care, or when proven health care practices are not followed. • Patient experience with care: Evaluates people’s perspective on their experience with a provider’s care, i.e., how well doctors communicate, know their patients, coordinate care, and provide quick access to appointments and care, and whether the outcome reflects a patient’s expectations. • Patient activation and engagement: Evaluates people’s ability and willingness – i.e., knowledge, skills, and confidence – to manage their health and health care. Providers can play an important role in developing these qualities. • Care coordination and care transitions: Assesses how well multiple providers work together to provide seamless care to a patient, including as he or she moves from one provider or care setting to another, or to their home. • Effective use of health information technology (HIT) by patients and care providers: Evaluates whether HIT improves how providers deliver care and/or helps patients become more engaged in their care. • Patient safety: Assesses the presence of medical errors and the use of processes and management practices proven to promote patient safety (e.g., hand hygiene, medication reconciliation, and effective teamwork). 	<ul style="list-style-type: none"> • Total cost to and expenditures by (1) the patient; (2) the insurer; and (3) the health care system: <ul style="list-style-type: none"> • Over the course of a year • Per case or acute episode • Efficiency of resource use: Includes key utilization metrics such as emergency department visits, hospital admissions, and readmissions.

Many of the identified measure types may fit into more than one section of the three-part aim.

Ten Criteria for Meaningful and Usable Measures of Performance

4 FOCUS MEASUREMENT ON AREAS OF CARE WHERE THE POTENTIAL TO IMPROVE HEALTH OUTCOMES AND INCREASE THE EFFECTIVENESS AND EFFICIENCY OF CARE IS GREATEST.

PROBLEM:

Measure development, endorsement, and use efforts don't always focus on areas of care with the greatest potential to improve quality and use resources effectively.

OPPORTUNITY:

To ensure the best possible return on investment, measure sets should:

- Focus on areas of practice with high frequency, high cost, wide variation, disparities in delivery, and/or evidence of care that is often inappropriate.
- Address leading causes of morbidity, mortality, and disability.
- Assess care of patients with multiple chronic conditions, a leading cost driver.
- Cover areas identified by the Institute of Medicine (IOM) as needing significant improvement: safety, timeliness, effectiveness, efficiency, equity, and patient-centeredness.
- Meet the four evaluation criteria used by the National Quality Forum (NQF)²: (1) importance to measure and report – especially to consumers and purchasers, (2) scientific acceptability of the measure properties, (3) feasibility, and (4) usability – especially by consumers and purchasers.
- Include measures of processes of care only if they have strong, evidence-based links to key outcomes and are consistent with current clinical guidelines.

We encourage decision-makers to use priorities identified by national organizations to guide work in measurement. Collectively, these priorities cover a breadth of areas important to consumers experiencing different health needs (e.g., preventive, acute conditions, chronic conditions). Such organizations include:

- The federal government's **National Quality Strategy**.
- The **National Quality Forum** (NQF) in its **prioritization** for measure development and endorsement of the top 20 conditions with a high impact on Medicare.
- The **National Priorities Partnership**.
- The **Measure Applications Partnership** (MAP), which is a public-private partnership convened by NQF for the explicit purpose of providing input to the Department of Health and Human Services on the selection of performance measures for public reporting and performance-based payment programs.

Ten Criteria for Meaningful and Usable Measures of Performance

5 ENSURE THAT MEASURES GENERATE THE MOST VALUABLE INFORMATION POSSIBLE.

PROBLEM:

Measures are not always collected or reported in the best way to aid decision-making by consumers, purchasers, health care providers, and policy-makers.

OPPORTUNITY:

A. Use statistical standards that allow variations in care to show through.

Measure developers should strike a balance between correcting for measurement errors that inadvertently classify providers as “outliers” and identifying providers that are actually “outliers.” Measures of outcomes and resource use typically incorporate statistical techniques, such as risk adjustment, risk-stratification, setting standards for reporting through confidence levels, and so forth. But the quest for a “pure” measure – i.e., striving for perfection over practicality – sometimes washes away important variations in care. Measures may be *over-adjusted* for risk and/or set overly stringent statistical standards, such as requiring a 95% certainty that the results precisely represent a provider’s performance on a measure or labeling most providers as “average” when large variations in care are known to exist. This is problematic because patients and purchasers need information that distinguishes performance among providers.

B. Capture data for disparities analysis.

Measures should be stratified by demographic information, such as race, ethnicity, language, gender, disability, and socioeconomic status. This will provide important information to help identify and address disparities.

C. Capture lab values and vital signs on a continuous scale.

Actual lab values and vital signs that represent valuable intermediate outcomes in treatment (e.g., LDL, HbA1c, blood pressure) should be captured so that the exact outcome can be collected. Intermediate outcome measures are often structured in a “yes” or “no” form, otherwise known as binary measures. An example is whether a patient with diabetes has “controlled blood sugar,” meaning that an HbA1c level of less than 8% (or 7% or 9%) has been achieved. These binary measures generally ask whether the outcome of care meets a threshold based on guidelines or opinions that are often subject to change. For measures like these, data should be captured on a continuous scale so that thresholds can be adjusted without needing to recapture the data from the source. For example, the exact HbA1c value would be captured (e.g., 7.6%).

Knowing the exact value of the outcome for each patient allows:

- Different thresholds to be set.
- Better evidence to inform clinical guidelines and identify which treatments work best for which patients.
- Providers to focus their improvement efforts.

D. Combine process measures into an all-or-none composite.

Where appropriate, process measures should be combined to create composites that reflect the set of processes that should be completed. The composite should, for a given condition, be based on a patient-centered approach (i.e., the patient has received all indicated tests and treatments known to provide significant positive health effects for their condition).

Ten Criteria for Meaningful and Usable Measures of Performance

6 REQUIRE THAT ALL PATIENTS FITTING APPROPRIATE CLINICAL CRITERIA BE INCLUDED IN THE MEASURE POPULATION.

PROBLEM:

Sometimes measures are constructed to allow patients to be excluded (using “exclusions” and “exceptions”) from the measure population for poorly defined reasons. This can:

- Lead to inappropriate removal of patients and promote “gaming” of results.
- Discourage providers from engaging patients.
- Mask the exact reason a patient is removed, resulting in loss of transparency and valuable information.
- Leave room for interpretation, thereby undermining comparability.

These concerns frequently arise when the reasons for exclusions and exceptions are too broad and/or not well substantiated.

An example of an exclusion category that is too broad is “patient reasons;” another is “system reasons.” Use of such ill-defined categories makes it difficult to compare performance across providers and identify trends in care. Another concern is that providers can remove any patient who does not adhere to treatment recommendations, even without a strong rationale. Permitting such exclusions does not encourage providers to do the important work of understanding why the patient isn’t following recommendations (e.g., patient didn’t comprehend the importance, is concerned about medication side effects, etc.) and help them overcome those barriers.

OPPORTUNITY:

To avoid these problems, reasons for exclusions and exceptions should **be evidence-based, highly specific, and explicitly defined.**

Examples of **justifiable, well-defined reasons** for removing a patient are:

- A measure of whether a physician provides mammography screening to women would not include women who have had their breast tissue removed. These women do not require the screening and therefore should not be included in the measure.
- A measure of whether a patient received or filled a prescription would not include a patient with an allergy to the medication.

7 ASSESS WHETHER TREATMENT RECOMMENDATIONS ARE FOLLOWED.

PROBLEM:

Many measures in use today are process measures that ask whether a provider made recommendations (e.g., prescribed a treatment, ordered a test, made a referral) in accordance with clinical guidelines. But there is an absence of measures that evaluate whether the provider, the patient’s care team, and the patient took these recommendations to completion. Such measures would reveal whether or not what should have happened for the patient actually happened. They are also critical for holding providers accountable for coordinating with other providers, and engaging patients in their care.

OPPORTUNITY:

Measures of the extent to which a physician’s recommendations followed clinical guidelines should be paired with measures of completion of recommended treatment (e.g., prescriptions ordered with prescriptions filled, tests ordered with test completion and results reported, care plan developed and followed by the care team, etc.). Shifting to a patient-centered perspective also requires that measures be developed and specified to allow for data collection from the patient, including assessing the extent to which patients understand and follow recommended care.

Ten Criteria for Meaningful and Usable Measures of Performance

8 DE-EMPHASIZE DOCUMENTATION (CHECK-THE-BOX) MEASURES.

PROBLEM:

“Check-the-box” measures document the occurrence of evaluation, assessment, counseling, and other steps by a provider, but tell us little about the quality of care provided or its outcomes. For example:

- Current measures of whether a clinician provided counseling on smoking cessation – an important element in caring for individuals and populations – don’t reveal how effective the counseling was.
- Measures of whether a physician performed an evaluation of a patient’s ability to walk after hip surgery don’t tell us whether the surgery actually made a difference. Rather, we need the results of the evaluation.

In fact, there is a poor relationship between such measures and patient outcomes.³ And when a measure is defined as a simple “check-the-box” (yes/no) item, it is often subjective and easy to “game.”

OPPORTUNITY:

- Ask the patient to provide feedback on the quality of the interaction with the physician on particular issues (e.g., smoking cessation); and in the longer term, determine whether the outcome was positive (e.g., whether the patient quit smoking).
- Report the results, not the occurrence, of evaluations and assessments.

9 MEASURE THE PERFORMANCE OF PROVIDERS AT ALL LEVELS (E.G., INDIVIDUAL PHYSICIANS, MEDICAL GROUPS, ACOs).

PROBLEM:

Many argue that measures, especially those involving patient outcomes, should only be applied at a higher level in the chain of care providers (at the level of the practice group, the ACO, etc.) rather than at the level of the individual physician. But consumers need to select individual physicians to be a part of their care team, even where team-based practice occurs.

OPPORTUNITY:

Performance should be measured at all levels, including the individual physician level, when sample sizes are sufficient. Consider that:

- Individual physicians make decisions that control 87% of personal health spending.⁴
- Data on practice groups do not always well represent an individual physician’s performance. The way physicians within the same group care for their patients can vary significantly, and individual physicians greatly impact the care that a patient receives.⁵

Even where sample sizes are small, performance information can be very valuable to physicians themselves to help them accelerate quality improvement. While patients and system factors related to the physician’s practice setting also affect clinical performance and its outcomes, we should measure performance and, once adjusted for critical patient risk factors, attribute it jointly to individual physicians, their team, and the system they practice in. In other words, we subscribe to a concept of **shared accountability**.

10 COLLECT PERFORMANCE MEASUREMENT DATA EFFICIENTLY.

PROBLEM:

Providers often raise issues about the amount of effort it takes for them to collect performance data.

OPPORTUNITY:

Ideally, performance measures should be based on the same data that clinicians use – or should use – to care for their patients. Specifications should call for measures to be populated with electronic data that are collected and used for patient care, including patient-reported outcomes. Where the data do not exist in electronic form today, there should be a clearly articulated path for future electronic collection and submission of data by increased reliance on electronic health records, as well as broader efforts by specialty societies, hospitals, nursing homes, and others to collect electronic data. Measure developers should also consider basing measures on administrative data when possible. Administrative data will continue to be an important source of information on the services provided, even when widespread adoption of EHRs occurs.

However, the desire to avoid encumbering providers with additional data collection requirements must be balanced against the tremendous need that patients, purchasers, and other stakeholders have for information. Patients face significant burdens every day when trying to navigate the health care system, including choosing a provider, trying to find affordable care, and determining what treatment will be best for them. At another level, purchasers and payers need information to help them reward higher-performing providers who generate better quality and value of care.

Ten Criteria for Meaningful and Usable Measures of Performance

ACKNOWLEDGEMENTS

We would like to thank the following reviewers from the consumer, purchaser, health plan, provider, and academic communities who provided helpful suggestions on an earlier version of this document:

Gail Amundson, MD, Andrew Baskin, MD, Larry Becker, Cheryl Damberg, PhD, Sam Ho, MD, Joel Hyatt, MD, George Isham, MD, Lisa Latts, MD, MSPH, MBA, Catherine MacLean, MD, PhD, Greg Pawlson, MD, MPH, Barbara Rudolph, PhD, MSSW, Cary Sennett, MD, PhD, Shoshanna Sofaer, DrPH, and Jenna Williams-Bader, MPH. Many of their suggestions were incorporated into the final product.

¹ Many of the identified measure types may fit into more than one section of the three-part aim.

² NQF is a nonprofit organization that uses a consensus process to engage multiple stakeholders in measure standardization at the national level.

³ Chassin M., Loeb J., Schmalz S., and Wachter R., "Accountability Measures – Using Measurement to Promote Quality Improvement," *New England Journal of Medicine*, June 2010. <http://healthcarereform.nejm.org/?p=3580>

⁴ Sager A. and Socola D., "Health Costs Absorb One-Quarter of Economic Growth, 2000-2005," Data Brief No. 8, Boston, MA: Boston University School of Public Health, February 2005. <http://dcc2.bumc.bu.edu/hs/Health%20Costs%20Absorb%20One-Quarter%20of%20Economic%20Growth%20%202000-05%20%20Sager-Socola%207%20February%202005.pdf>

⁵ Rodriguez et al, "Attributing Sources of Variation in Patients' Experiences of Ambulatory Care," *Medical Care*, Vol. 47, No. 8, August 2009.

ABOUT THE CONSUMER-PURCHASER DISCLOSURE PROJECT

The Consumer-Purchaser Disclosure Project is a coalition dedicated to improving the quality and affordability of health care in America for consumers and health care purchasers. The project's mission is to put the patient in the driver's seat – to share useful information about provider performance so that patients can make informed choices and the health care system can better reward the best performing providers. The coalition is comprised of leading national and local consumer organizations, employers, and labor organizations. The Consumer-Purchaser Disclosure Project is funded by the Robert Wood Johnson Foundation along with support from participating organizations.

For more information, contact info@healthcaredisclosure.org or visit our website at www.healthcaredisclosure.org.

Appendix 1:
Example of a Comprehensive Dashboard of Measures for Maternity Care

PRENATAL
(Outpatient setting)

DELIVERY
(Inpatient setting)

POSTPARTUM
(Inpatient and outpatient setting)

PATIENT-REPORTED OUTCOMES OF TREATMENT

- Health status after delivery (e.g., presence of pain and/or infection, presence of postpartum depression) 4-6 weeks post discharge*
- Effective treatment for maternal morbidities (e.g., pain and/or infection, postpartum depression)*

PATIENT EXPERIENCE WITH CARE

- Patient experience of care* (e.g., CAHPS modified for maternity care)

PATIENT ENGAGEMENT

- Patient receives high-quality, understandable information about impact of interventions (e.g., C-section, induction)*
- Effective use of shared decision-making*
- Patients with previous C-section are offered a VBAC if available (either directly or through referral)*
- Patients are offered a range of options for pain management (e.g., non-pharmacological options vs. pain medications such as epidurals, spinal analgesia, narcotics, etc.)*
- In active labor, mother has right to self-determination (i.e., provider follows patient's wishes)

CLINICAL OUTCOMES OF TREATMENT

- Healthy term newborns
- Term newborns with hospital-acquired conditions
- Maternal complications (e.g., hemorrhage, infections, DVT)
- Exclusive breastfeeding
- Maternal and newborn readmissions

Appendix 1: Example of a Comprehensive Dashboard of Measures for Maternity Care

PRENATAL (Outpatient setting)	DELIVERY (Inpatient setting)	POSTPARTUM (Inpatient and outpatient setting)
CARE COORDINATION AND TRANSITIONS		
<ul style="list-style-type: none"> • Patient preferences shared with entire care team • Information exchange between patient's primary physician and delivering provider on patient's health needs 	<ul style="list-style-type: none"> • Adherence to patient preferences* • Prenatal record available at the birth site (should include patient's delivery preferences) 	<ul style="list-style-type: none"> • Maternity care record (including patient-reported outcomes) shared with patient's primary care physician (e.g., patient with gestational diabetes would benefit from this sharing of information)
APPROPRIATENESS OF CARE (OVERUSE, UNDERUSE)		
<ul style="list-style-type: none"> • Screening for domestic abuse and substance abuse • Advice and appropriate referrals for those who are smoking and/or engaging in substance abuse • Patient receives selected essential prenatal care¹ 	<ul style="list-style-type: none"> • Spontaneous births and labor (a composite) (e.g., no induced labor, augmented labor, assisted delivery, or Cesarean section) • VBAC for low-risk women • Low-risk C-section in first births • Elective delivery between 37 and 39 weeks • Elective induction under 41 weeks • Use of episiotomy • Healthy newborns admitted to the NICU 	<ul style="list-style-type: none"> • Skin-to-skin contact in the first hours after birth
TOTAL COST TO AND EXPENDITURES BY (1) THE PATIENT; (2) THE INSURER; AND (3) THE HEALTH CARE SYSTEM/EFFICIENCY OF RESOURCE USE		
<ul style="list-style-type: none"> • Cost of prenatal care 	<ul style="list-style-type: none"> • Cost of delivery-associated care (e.g., physician, hospital, midwife, birth center) – covering episode of care for mother and baby • Length of stay (mother and baby) 	<ul style="list-style-type: none"> • Cost of newborn (prior to hospital discharge) • Hospital readmission (mother or baby)

Note: Identified elements of maternity care can apply to more than one domain.

*Elements that could be captured through a patient survey.

¹For example, prenatal care should begin within the first ten weeks and include antenatal corticosteroids for accelerating fetal lung maturation for women at risk of preterm birth.

Acknowledgements: We would like to thank Elliot Main, MD, Maureen Corry, MPH, and Carol Sakala, PhD, MSPH, for helping us develop the example of a comprehensive dashboard for maternity care.